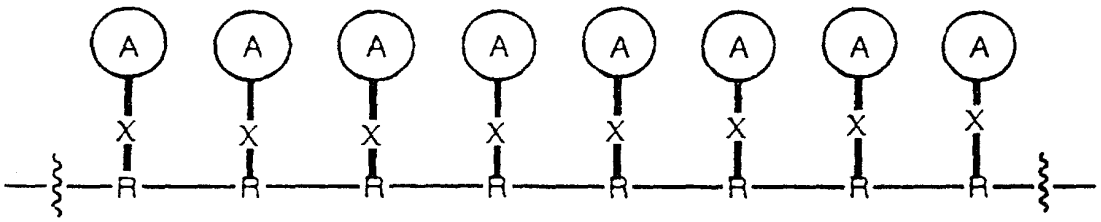
CLAIMS:

1. An antiviral compound comprising a linear non-carbohydrate polymer having a plurality of side chain groups, wherein at least one of said side chain groups has an anionic- or cationic-containing moiety bonded or linked thereto.

2. A compound according to claim 1, comprising a linear polymer of the general formula I:



wherein:
R is a non-carbohydrate monomer unit forming a linear polymer backbone;
X is an optional linking group on the side chain groups of monomer units R; and
A is an anionic-containing moiety.

3. A compound according to claim 2, wherein said linear polymer has a median range of molecular weight distribution from 1,000 to 1,000,000

4. A compound according to claim 3, wherein said median range of molecular weight distribution is from 10,000 to 600,000.

5. A compound according to claim 2, wherein said monomer unit R is an amine or amide moiety.

6. A compound according to claim 5 wherein said monomer unit R is a lysine or other

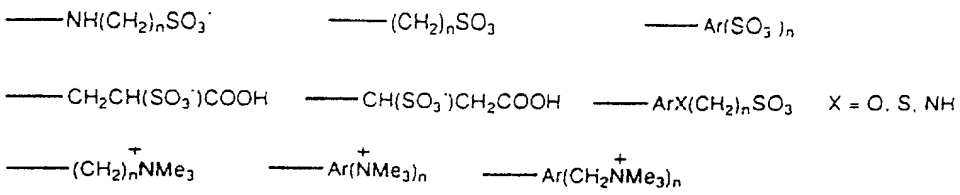
7. A compound according to claim 2, wherein said linking group X, when present, is a functional linking group selected from the group consisting of esters, amides, ethers, thioethers, amines, ureas, thioureas, carbamates and carbonates.

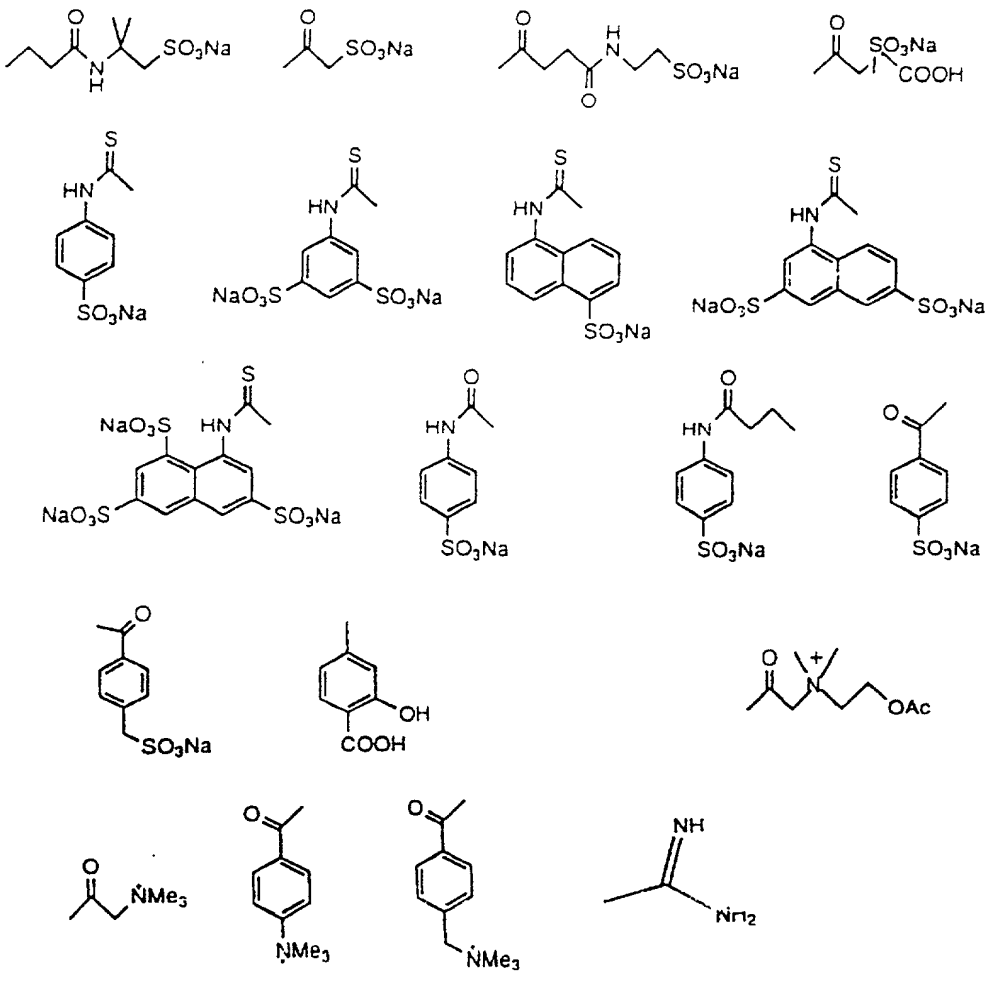
8. A compound according to claim 2, wherein said linking group X, when present, is a spacer group selected from the group consisting of alkyl chains which may be optionally substituted or branched; alkoxy, polyalkoxy, alkylthio or polyalkylthio chains which may be optionally substituted; alkenyl, multiple alkenyl, alkynyl or multiple alkynyl chains which may be optionally substituted; and groups of the formula $-(CH_2)_n-2-(CH_2)_n-$ wherein C is $-CH_2-$, $-CH=CH-$, $-C\equiv C-$, -O- or -S-, and n is an integer of from 1 to 15.

9. A compound according to any one of claims 1 to 8, wherein said anionic- or cationic-containing moiety or moieties are bonded to amine, sulfhydryl, hydroxy or other reactive functional side chain groups of said linear polymer by amide or thiourea linkages.

10. A compound according to any of claims 1 to 9, wherein said anionic-containing moieties are selected from the group consisting of sulfonic acid-containing moieties, carboxylic acid-containing moieties (including neuraminic and sialic acid-containing moieties and modified neuraminic and sialic acid-containing moieties), boronic acid-containing moieties, and phosphoric and phosphonic acid-containing moieties (including esterified phosphoric and phosphonic acid-containing moieties).

11. A compound according to any one of claims 1 to 9, wherein the moiety or moieties which are bonded to amino or other reactive functional side chain groups are selected from the following groups, in which n is zero or a positive integer:


—NH(CH2)nSO3-
—(CH2)nSO3
—Ar(SO3-)n
—CH2CH(SO3-)COOH
—CH(SO3-)CH2COOH
—ArX(CH2)nSO3 X = O, S, NH
—(CH2)nN+Me3
—Ar(N+Me3)n
—Ar(CH2N+Me3)n


SO3Na
COOH
OH
OAc
NMe3
NH2

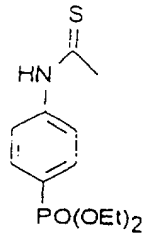
—— $ArXP(=O)(OR)_2$ X = O, CH_2, CHF CF_2 R = alkyl, aryl, H, Na.

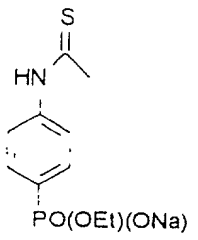
—— $ArXP(=O)(OR^1)(NR^2R^3)$ X = O, CH_2, CHF, CF_2 R^1 = alkyl, aryl, H, Na R^2, R^3 = alkyl, aryl

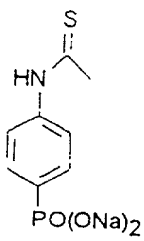
—— $Ar[P(=O)(OR)_2]_n$ R = alkyl, aryl, H, Na n = 1-3

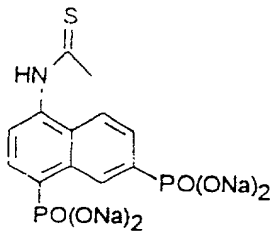
—— $Ar[B(OH)_2]_n$ n = 1-3

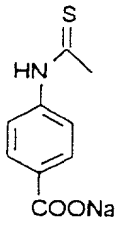
—— $Ar[COOH]_n$ n = 1-3

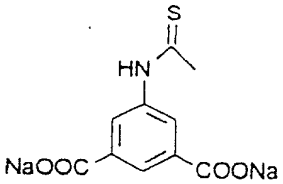


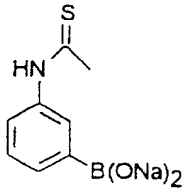


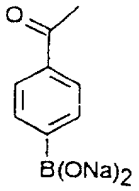


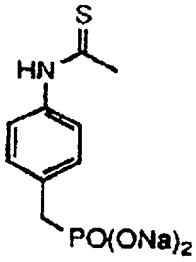


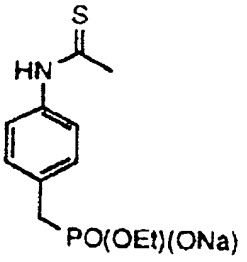


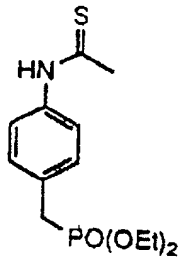


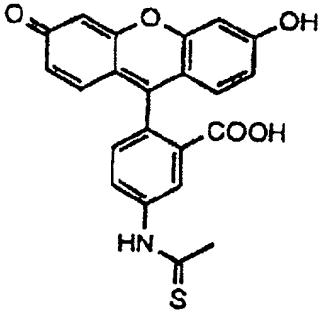


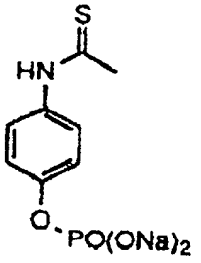


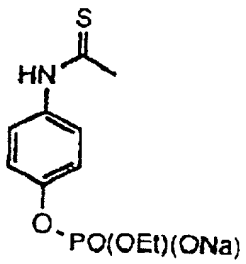


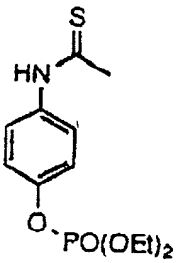












12. A compound according to claim 1 or claim 2, which is selected from the group consisting of:

i. 4-sulfophenylthiourea terminated poly-L-lysines;

ii. 3,6-disulfonaphthylthiourea terminated poly-L-lysines;

iii. (8-octanamido)-5-acetamido-3,5-dideoxy-2-thio-D-glycero-α-D-galacto-2-nonulopyranosidic acid terminated poly-L-lysines;

iv. 3,5-dicarboxyphenylthiourea terminated poly-L-lysines;

v. 4-(phosphonomethyl)phenylthiourea terminated poly-L-lysines;

vi. 1-phosphonooxyphenyl-4-thiourea terminated poly-L-lysines; and

vii. benzamido-4-boronic acid terminated poly-L-lysines.

13. A pharmaceutical or veterinary composition for prophylactic or therapeutic antiviral treatment of a human or non-human animal, which comprises a compound of any of claims 1 to 12, in association with at least one pharmaceutically or veterinarily acceptable carrier or diluent.

14. A method for prophylactic or therapeutic antiviral treatment of a human or non-human animal, which comprises administering to said human or animal or prophylactic- or therapeutic-antiviral-effective amount of a compound of any of claims 1 to 12.

15. A method according to claim 14, wherein said antiviral treatment is treatment of infection by HIV-1 or HIV-2, Hepatitis B or C, Bovine Viral Diarrhoea Virus, Japanese Encephalitis Virus (JEV), Human Influenza Virus A and B, Rhinoviruses, Corona Viruses, Human Parainfluenza Virus, Respiratory Syncytial Virus (RSV), Varicella Zoster Virus (VSV), Human Cytomegalovirus (CMV), Epstein Barr Virus (EBV), Human Papilloma Virus (HPV), Adenoviruses, Herpes Simplex Virus (HSV) type 1 and 2, Measles Virus or Vesicular Stomatitis Virus (VSV).

16. Use of a compound of any of claims 1 to 12, in the prophylactic or therapeutic antiviral treatment of, or in the manufacture of a medicament for prophylactic or therapeutic antiviral treatment of, a human or non-human animal.